

REMARKS

The grammatical error in claim 9 has been noted and corrected by amendment herein.

The reissue declaration, which has been objected to as being defective for lack of signatures by all named inventors, is presented herewith as fully executed by the available inventors. One of the inventors could not be contacted, and a petition under 37 C.F.R. §1.47(a) in support of the requirement for the inventor's signature is submitted herewith. The rejection of claims 1-28 as being based upon a defective reissue declaration is therefore respectfully traversed, and withdrawal of this basis for rejection is requested.

Claims 10, 11, 14, 19 and 28 have been rejected under 35 USC §112, ¶2, as being indefinite for failure to particularly point out and distinctly claim the subject matter which applicants regard as the invention.

Specifically, these claims have been amended in consideration of the Examiner's comments to obviate bases for confusion or inaccuracy or inconsistency with the subject matter as illustrated and described, or with the subject matter as claimed in parent and dependent claims. These claims as amended are now submitted to define the invention with sufficient particularly and distinctiveness to be patentable to applicants.

Claim 1, 2 and 5-7 have been rejected under 35 USC §102(b) as being anticipated by, or in the alternative under 35 USC §103(a) as being obvious in view of Bonutti '975. These rejections are respectfully traversed.

These claims have been amended merely to define more specifically an inherent aspect of the elements and structure of the invention. As amended, these claims now specifically recite “an elongated control rod rotatably and translationally supported by the cannula eccentric of said lumen, with a rigid dissection probe having a portion eccentric the control rod and positioned at one end of the control rod near the distal end of the cannula for rotational and translational positioning relative thereto”.

In addition, the dependent claims are further limited by the specific recitations of “said distal end of the cannula includes a recess for enclosing the dissection probe therein in response to inward translational movement of the control rod relative to said distal end and in response to rotational alignment of (a) the cannula about an endoscope disposed within the lumen, and (b) the eccentric portion of dissection probe rotatable with the control rod”, or “the control rod and the dissection probe attached thereto translate relative to the cannula from within the recess at the distal end thereof to a location spaced forward of the distal end and within the viewing field of the endoscope”, “an endoscope is positionable in substantially fixed axial position relative to the ends of the cannula”, or “an

endoscope having a viewing end is positionable in fixed axial position relative to the cannula with the viewing end recessed within the cannula inwardly from the distal end thereof’.

These aspects of the claimed invention promote wide reach for manipulation of the dissection probe, as illustrated and described, for example, with reference to Figures 6 and 7B.

These aspects of the claimed invention are not disclosed or even suggested by Bonutti ‘975 which is understood to rely upon a bladder or balloon of various configurations to operate as a retractor rather than as a tissue dissector of the type as now claimed. Nor is there disclosed or suggested in this reference any recess into which a tissue dissector may retract in the manner as claimed. And, as the Examiner observes, the endoscope 40 is not fixed to the cannula 38, and it is noted that the endoscope is also not disclosed to be recessed within the distal end of the cannula. The deficient disclosure of this reference thus fails to establish even a *prima facie* basis from which anticipation or obviousness of applicants’ claims can be properly determined. It is therefore respectfully submitted that amended claims 1, 2 and 5-7 are now patentably distinguishable over the cited reference.

Claims 3, 4 and 8 have been rejected under 35 USC§103(e) as being unpatentable over Bonutti ‘975. This rejection is respectfully traversed.

These dependent claims are further limited by specific recitations of “a fluid seal disposed within the recess about the control rod near the distal end of the cannula and disposed to receive an endoscope therethrough for maintaining fluid-tight engagement”, or “a fluid seal disposed near the proximal end of the cannula for receiving an endoscope therethrough to maintain fluid-tight engagement”, or “the dissection probe includes a substantial loop positioned in a plane skewed relative to the axis of the control rod”.

These aspects of the claimed invention are not disclosed or suggested by the cited reference which, as the Examiner correctly notes, fails to disclose a fluid seal in the cannula, and also fails to disclose a dissection probe as a substantial loop in a manner as claimed by applicants. At best, this reference appears to rely upon a bladder or balloon to operate as a retractor that simply deflates and retracts into the cannula, as illustrated and described, for example, with reference to Figure 16. It is respectfully submitted that there is no hint or suggestion or instruction contained in this reference that would support a proper finding of obviousness of these amended claims which are therefore submitted to be patentable over the reference.

Claims 9, 11, 14, 17, 18 and 22-27 have been rejected under 35 USC §102(b) as being anticipated by, or in the alternative under 35 USC §103(a) as being obvious in view of, Bonutti’ ‘971. These rejections are respectfully traversed.

These claims, which have been amended in consideration of the Examiner's comments to obviate an apparent inconsistency regarding whether an endoscope forms a part of the claimed structure, now variously recite "a second lumen in the cannula eccentric of the first lumen between the ends of the cannula for supporting an instrument therein for rotational and translational manipulation thereof near the distal end of the cannula via controls near the proximal end of the cannula", or "an endoscope as an instrument within the second lumen", or "including as an instrument within the second lumen an elongated rod with a dissection probe attached at an end thereof disposed near the distal end of the cannula", or "an operative tip positioned at one end of the endoscopic instrument near the distal end of the cannula for selective positioning relative thereto, the endoscopic instrument including another end disposed near the proximal end of the cannula to facilitate manual manipulation of the operative tip at said one end of the endoscopic instrument in association with selective relative rotation of the cannula and the endoscope disposed within said lumen".

In addition, these claims variously recite "the cannula includes a recess for enclosing the operative tip therein in response to inward translational movement of the endoscopic instrument relative to said distal end", or "the endoscopic instrument translates relative to the cannula to position the operative tip at a location spaced forward of the distal end and within the viewing field of the endoscope", or "an

endoscope having a viewing end is positionable in fixed axial position relative to the cannula with the viewing end recessed within the cannula inwardly from the distal end thereof to exclude distal edges of the cannula from within a viewing field of the endoscope”, or “the endoscopic instrument and the operative tip attached thereto translate relative to the cannula from near the distal end thereof to a location spaced forward of the distal end and within a viewing field of an endoscope disposed within the lumen”, or “supporting an endoscopic instrument therein having an operative tip for selective manipulation of the operative tip near the distal end of the cannula via manual controls disposed near the proximal end of the cannula”.

These aspects of the claimed invention facilitate manipulation of the operative tip of an endoscopic instrument about its rotational axis within the cannula that is eccentric the rotational axis of the cannula about the endoscope for extended reach of the operative tip about the rotational axis of the endoscope.

These aspects of the claimed invention are not disclosed or suggested by Bonutti' 971. Specifically, as this reference is understood, the operative tip for its intended operation as an arthroscopic retractor appears to be the expandable arms 62 that are not operable as an endoscopic instrument from within a lumen of a supporting cannula, in a structure as claimed by applicants. Although an endoscope may be rotatably received within a lumen of the cannula, as the Examiner notes, there is nevertheless no disclosure here of rotatably operating an endoscopic

instrument with an operative tip from within another lumen of the cannula that is eccentric the endoscope (or lumen therefore), as claimed by applicants. At best, this reference operates the expandable arms 62 along the outside of the cannula. It is therefore respectfully submitted that claims 9, 11, 14, 17, 18, and 22-27 are therefore patentably distinguishable over the cited art.

Claims 10, 19-21 and 28 have been rejected under 35 USC §103(a) as being unpatentable over Bonutti' 971. This rejection is respectfully traversed.

These dependent claims are further limited from their predecessor claims by the specific recitations of "a fluid seal disposed within the lumen near the distal end of the cannula to receive an instrument therethrough for maintaining fluid-tight engagement", or "a fluid seal disposed within the cannula about the endoscopic instrument and disposed to receive an endoscope therethrough for maintaining fluid-tight engagement", or "a fluid seal disposed within the recess about the endoscopic instrument near the distal end of the cannula and disposed to receive an endoscope therethrough for maintaining fluid-tight engagement", or "a fluid seal disposed near the proximal end of the cannula for receiving an endoscope therethrough to maintain fluid-tight engagement", or "a fluid seal disposed in the lumen in the cannula intermediate the proximal and distal ends to receive an endoscope and an endoscopic instrument therethrough for maintaining fluid-tight engagement".

These aspects of the invention as now variously claimed are not shown or suggested by the cited art, and have not been shown to be old or well known in this art. It is therefore respectfully submitted that these dependent claims as further limited over the claims from which they depend are therefore patentably distinguishable over the cited art.

Claim 16 has been rejected under 35 USC §103(a) as being unpatentable over Bonutti '975 in view of Okutsu '620. This rejection is respectfully traversed.

Claims 16 as amended herein now specifically recites "the cannula configured with the operative tip disposed within the distal end of the cannula for insertion thereof into a surgical site; inserting the distal end of the cannula within a surgical site; distally extending the operative tip from within the distal end of the cannula within the surgical site; and selectively rotating the cannula and endoscope relative to the endoscopic instrument for rotationally manipulating the extended operative tip within the surgical site in visualization through selective rotational positioning thereof relative to the endoscope".

These aspects of the claimed invention, as illustrated and described, for example, with reference to Figure 5, are not disclosed or even suggested by these references which are deficient of disclosure of the extendable and rotationally relative positioning of an operative tip, cannula and endoscope, in a manner as

claimed by applicants. At best, Bonutti '975 discloses an inflatable retractor 10 disposed within cannula 196 for insertion through opening 198, for example, as illustrated and described with reference to Figure 16, and even discloses various shapes of retractors (FIGS. 5A-5E), but offers no hint or suggestion of rotational manipulation of an extended operative tip, in a manner as claimed by applicants. And, while it is noted that Okutsu '620 discloses rotation of an endoscope, there is no disclosure here of extending and rotating an endoscopic instrument relative to such an endoscope in the manner as claimed by applicants.

Thus merely combining Bonutti '975 with Okutsu '620 as proposed by the Examiner fails to establish even a *prima facie* basis from which a proper determination of obviousness under 35 U.S.C. §103(a) can be made. It is therefore respectfully submitted that claim 16 as now amended is patentably distinguishable over the cited art.

Claim 16 has been rejected under 35 U.S.C. §102(e) as being anticipated by Green '137. This rejection is respectfully traversed.

This claim as amended herein specifically recites "the cannula configured with the operative tip disposed within the distal end of the cannula for insertion thereof into a surgical site; inserting the distal end of the cannula within a surgical site; distally extending the operative tip from within the distal end of the cannula within the surgical site; and selectively rotating the cannula and endoscope

relative to the endoscopic instrument for rotationally manipulating the extended operative tip within the surgical site in visualization through selective rotational positioning thereof relative to the endoscope”.

This aspect of the claimed invention, as discussed in the above Remarks is not disclosed or even suggested by Green '137 which is understood to clamp the cannula within a collet in one or other fixed angular positions (e.g. Figs. 25, 26), with a lug 800 disposed to engage a recess 805 (e.g. Fig. 24) to lock the cannula against rotation. And, merely rotating the endoscope within the clamped cannula (e.g., Fig. 31, 32) offers no hint or suggestion of additional rotational capabilities of the defined elements, as claimed by applicants. At best, then, this reference is deficient of disclosure of applicants' claimed invention and claim 16 is submitted to be patentably distinguishable over the cited art.

Reconsideration and allowance of all pending claims are solicited.

Respectfully submitted,
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ATTACHMENTS: Reissue Declaration
Response Regarding Reissue Declaration and Petition
Under 37 C.F.R. §1.47(a)
Declaration of Facts by Albert C. Smith in Support of
Petition Under 37 C.F.R. §1.47(a)
Exhibits A-B